

HW 9
CP Physics

1. A tugboat pulls a ship with a constant net horizontal force of 5.00×10^3 N and causes the ship to move through a harbor. How much work is done on the ship if it moves a distance of 3.00 km?
2. A weight lifter lifts a set of weights a vertical distance of 2.00 m. If a constant net force of 350 N is exerted on the weights, what is the net work done on the weights?
3. Two bullets have masses of 3.0 g and 6.0 g, respectively. Both are fired with a speed of 40.0 m/s. Which bullet has more kinetic energy? What is the ratio of their kinetic energies?
4. What is the speed of 0.145 kg baseball if its kinetic energy is 109 J?